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RESPONSES TO OEPA RESPONSES TO DOE RESPONSES TO OEPA COMMENTS ON THE INTEGRATED ENVIRONMENTAL MONITORING STATUS REPORT FOR THIRD QUARTER 1999

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO

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U.S. DEPARTMENT OF ENERGY

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ADDITIONAL ORIGINAL COMMENT

1. Commenting Organization: Ohio EPA Commentor: Schneider
Section #: Not Applicable (NA) Page #: NA Line #: NA
Additional Original Comment #: 5

Comment: In DOE's response to OEPA's comment regarding the decision not to develop the Great Miami Aquifer monitoring well for Cell 4, they indicate that a low water table elevation of 513 feet was measured in December 1999. The well was constructed with a 15 foot screen interval (523.24 to 507.68 feet) such that the screen midpoint corresponds to the mean water table elevation of wells in the immediate vicinity, in accordance with work plan methodology. DOE should use the site groundwater flow model to simulate groundwater levels in the OSDF vicinity with the assumption of worst case drought water level conditions. Groundwater pumpage from the future production area restoration modules should also be included in the simulation. The resulting simulated water levels should be compared to monitoring well screen intervals designed using current (unstressed) water level data in order to verify that the wells will have sufficient water levels for sample collection in the future.

Response: The commentor incorrectly references the screen placement methodology for Cell 4 downgradient monitoring well (Monitoring Well 22205). The U.S. Department of Energy's (DOE's) response stated that: "The approved work plan methodology for selecting the screen interval for the on-site disposal facility monitoring wells is as follows: The 15-foot long screen is set based on the average seasonal low water table, with five feet of the screen to be above this elevation and 10 feet to be below. Water levels in site monitoring wells are evaluated to determine the average seasonal low water table in the vicinity of the on-site disposal facility. For Monitoring Well 22205 (the subject of the comment), water level records from 1993 through 1999 in four wells (2424, 2417, 2430, and 2446) were evaluated with the resulting average seasonal low water table determined to be about 518 feet amsl. The screened interval of Monitoring Well 22205 was set across an interval from an elevation of 523.24 to 507.68 feet amsl."

DOE agrees with the commentor that it may be beneficial to use the site groundwater flow model to assist in making decisions regarding on-site disposal facility monitoring well screen placement. However, input parameters must be agreed upon prior to running the model. For example, DOE's opinion of "worst case drought conditions" may be different than the Ohio Environmental Protection Agency's (OEPA's). DOE suggests that the groundwater model input parameters for OEPA's suggested modeling run be a topic for discussion in one of the weekly site conference calls.

Action: DOE will meet with OEPA to reach concurrence regarding groundwater model input parameters for simulation to assist in determining screen placement interval in future Great Miami Aquifer monitoring wells for the on-site disposal facility.